

REMARKS

This is in response to the Office Action mailed on January 5, 2004, and the references cited therewith.

Claims 1-28 are currently pending in this application.

Information Disclosure Statement

Applicant submitted an Information Disclosure Statement and a 1449 Form on December 17, 2001. Applicant respectfully requests that initialed copies of the 1449 Forms be returned to Applicants' Representatives to indicate that the cited references have been considered by the Examiner.

§102 Rejection of the Claims

Each of the following rejections lack specificity, reciting only the alleged general teaching of the reference, without direct application to any of the claims. 37 CFR § 1.104(a)(2) states that: "The reasons for any adverse action or any objection or requirement will be stated in an Office action and such information or references will be given as may be useful in aiding the applicant."

MPEP § 707.07(d) further states: "Where a claim is refused for any reason relating to the merits thereof it should be 'rejected' and **the ground of rejection fully and clearly stated.**" (emphasis added.) Since no such fully and clearly stated grounds or reasons are provided, Applicant request a new Non-Final Office Action, either allowing the claims, or providing reasons that may be useful in adding Applicant.

Claims 1-28 were rejected under 35 USC § 102(b) as being anticipated by Bernstein et al. (U.S. Patent No. 6,066,295). The rejection is respectfully traversed, and many element of the claims have not been shown to be in the reference. The Office Action only states that: "Bernstein et al. teach a system for remote analysis of chemical or biological agents dispersed in the atmosphere using tools such as LIDAR." A prima facie case of anticipation has not been established, and the rejection should be withdrawn.

Claim 1 describes a plurality of sensors, and a controller that receives information from the sensors to determine whether agents are a threat with a greater probability than any

individual sensor. The Office Action does not point out where these elements are found in the reference.

Claims 2-8 depend from claim 1 and are believed patentable for at least the same reasons.

Claims 9-13 describe a plurality of different types of sensors, and a controller that phases operation of the sensors based on information received from the sensors. The Office Action does not point out where these elements are found in the reference.

Claim 14 describes a plurality of different types of sensors dispersed within a confined space, and a controller that receives information from the sensors to determine whether an agent threat exists for the space. The Office Action does not point out where these elements are found in the reference.

Claim 15 describes a plurality of sensors for detecting agents in an area and a controller that controls the sensors and receives information from them to determine whether an agent threat exists based on probabilities of agents received from the sensors. The Office Action does not point out where these elements are found in the reference.

Claim 16 describes a plurality of different sensors placed in predetermined positions that detect agents in an area, and a controller that controls the sensors and receives information from them to determine whether an agent threat exists. The Office Action does not point out where these elements are found in the reference.

Claim 17 describes a plurality of different sensors for detecting agents in multiple areas with a probability of accuracy, a plurality of integrating controllers coupled to selected groups of the sensors to determine threats to respective areas with greater probability than any individual sensor, and an operating controller that performs data fusion to determine a final decision for an entire area under protection. The Office Action does not point out where these elements are found in the reference.

Claim 18 describes a plurality of sensors for detecting agents in an area and a controller that controls the sensors and receives information from the sensors to determine whether an agent threat exists. The controller also controls some of the sensors based on information received from at least one of the other sensors. The Office Action does not point out where these elements are found in the reference.

Claims 19-23 describe a method using a network of multiple different types of sensors to receive an indication of a probable threat from at least one of the sensors. The sequence of operations of other sensors in the network is modified based on the indication provided the at least one sensor. The Office Action does not point out where these elements are found in the reference.

Claim 24 describes a network for detecting agents that has a plurality of different sensors placed at predetermined positions within an area, a controller that controls the sensors and receives information from them to determine whether an agent threat exists, and a modeling system to determine the optimum location of the sensors. The Office Action does not point out where these elements are found in the reference.

Claim 25 describes a method of making a network for detecting agents. A plurality of different sensors for detecting agents are selected for an area and placed at predetermined positions within the area. The sensors are controlled, and information received from them is used to determine whether an agent threat exists. The system of sensors is modeled to determine the optimum location of sensors. The Office Action does not point out where these elements are found in the reference.

Claims 26-27 describe a method of forming a network for detecting agents by selecting a plurality of different types of sensors, determining the characteristics of the sensors and using them to model the sensors, and configuring the network using a genetic-algorithm-based system optimization. The Office Action does not point out where these elements are found in the reference.

Claim 28 describes a method of modeling sensors for a network that detects agents by creating multiple threat scenarios having different agent/clutter ratios. A sample of the threats are collected and prepared for sensing by the sensors. The threats are verified, and the performance of the sensors is analyzed using the verified threats to create a component database. The Office Action does not point out where these elements are found in the reference.

As several elements of each of these claims were not shown to be in the reference, the rejection should be withdrawn.

Claims 1-28 were rejected under 35 USC § 102(b) as being anticipated by Megerle (U.S. Patent No. 5,874,046). The rejection is respectfully traversed, and many element of the claims have not been shown to be in the reference. The Office Action only states that: "Megerle teaches a sensor system to detect airborne and water borne microorganism that may be used in biological warfare in real time." A prima facie case of anticipation has not been established, and the rejection should be withdrawn.

Claim 1 describes a plurality of sensors, and a controller that receives information from the sensors to determine whether agents are a threat with a greater probability than any individual sensor. The Office Action does not point out where these elements are found in the reference.

Claims 2-8 depend from claim 1 and are believed patentable for at least the same reasons.

Claims 9-13 describe a plurality of different types of sensors, and a controller that phases operation of the sensors based on information received from the sensors. The Office Action does not point out where these elements are found in the reference.

Claim 14 describes a plurality of different types of sensors dispersed within a confined space, and a controller that receives information from the sensors to determine whether an agent threat exists for the space. The Office Action does not point out where these elements are found in the reference.

Claim 15 describes a plurality of sensors for detecting agents in an area and a controller that controls the sensors and receives information from them to determine whether an agent threat exists based on probabilities of agents received from the sensors. The Office Action does not point out where these elements are found in the reference.

Claim 16 describes a plurality of different sensors placed in predetermined positions that detect agents in an area, and a controller that controls the sensors and receives information from them to determine whether an agent threat exists. The Office Action does not point out where these elements are found in the reference.

Claim 17 describes a plurality of different sensors for detecting agents in multiple areas with a probability of accuracy, a plurality of integrating controllers coupled to selected groups of the sensors to determine threats to respective areas with greater probability than any individual sensor, and an operating controller that performs data fusion to determine a final decision for an

entire area under protection. The Office Action does not point out where these elements are found in the reference.

Claim 18 describes a plurality of sensors for detecting agents in an area and a controller the controls the sensors and receives information from the sensors to determine whether an agent threat exists. The controller also controls some of the sensors based on information received from at least one of the other sensors. The Office Action does not point out where these elements are found in the reference.

Claims 19-23 describe a method using a network of multiple different types of sensors to receive an indication of a probable threat from at least one of the sensors. The sequence of operations of other sensors in the network is modified based on the indication provided the at least one sensor. The Office Action does not point out where these elements are found in the reference.

Claim 24 describes a network for detecting agents that has a plurality of different sensors placed at predetermined positions within an area, a controller that controls the sensors and receives information from them to determine whether an agent threat exists, and a modeling system to determine the optimum location of the sensors. The Office Action does not point out where these elements are found in the reference.

Claim 25 describes a method of making a network for detecting agents. A plurality of different sensors for detecting agents are selected for an area and placed at predetermined positions within the area. The sensors are controlled, and information received from them is used to determine whether an agent threat exists. The system of sensors is modeled to determine the optimum location of sensors. The Office Action does not point out where these elements are found in the reference.

Claims 26-27 describe a method of forming a network for detecting agents by selecting a plurality of different types of sensors, determining the characteristics of the sensors and using them to model the sensors, and configuring the network using a genetic-algorithm-based system optimization. The Office Action does not point out where these elements are found in the reference.

Claim 28 describes a method of modeling sensors for a network that detects agents by creating multiple threat scenarios having different agent/clutter ratios. A sample of the threats

are collected and prepared for sensing by the sensors. The threats are verified, and the performance of the sensors is analyzed using the verified threats to create a component database. The Office Action does not point out where these elements are found in the reference.

As several elements of each of these claims were not shown to be in the reference, the rejection should be withdrawn.

Claims 1-28 were rejected under 35 USC § 102(e) as being anticipated by Wyatt (U.S. Patent No. 6,490,530). The rejection is respectfully traversed, and many element of the claims have not been shown to be in the reference. Applicant reserves the right to swear behind the reference at a later date. The Office Action only states that: "Wyatt teaches an aerosol hazard early warning network that detects chemical and biological agents using techniques such as LIDAR." A prima facie case of anticipation has not been established, and the rejection should be withdrawn.

Claim 1 describes a plurality of sensors, and a controller that receives information from the sensors to determine whether agents are a threat with a greater probability than any individual sensor. The Office Action does not point out where these elements are found in the reference.

Claims 2-8 depend from claim 1 and are believed patentable for at least the same reasons.

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Claim 15 describes a plurality of sensors for detecting agents in an area and a controller that controls the sensors and receives information from them to determine whether an agent threat exists based on probabilities of agents received from the sensors. The Office Action does not point out where these elements are found in the reference.

Claim 16 describes a plurality of different sensors placed in predetermined positions that detect agents in an area, and a controller that controls the sensors and receives information from them to determine whether an agent threat exists. The Office Action does not point out where these elements are found in the reference.

Claim 17 describes a plurality of different sensors for detecting agents in multiple areas with a probability of accuracy, a plurality of integrating controllers coupled to selected groups of the sensors to determine threats to respective areas with greater probability than any individual sensor, and an operating controller that performs data fusion to determine a final decision for an entire area under protection. The Office Action does not point out where these elements are found in the reference.

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optimum location of sensors. The Office Action does not point out where these elements are found in the reference.

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Serial Number: 10/021898

Dkt: 256.121US1

Filing Date: December 17, 2001

Title: ARCHITECTURES OF SENSOR NETWORKS FOR BIOLOGICAL AND CHEMICAL AGENT DETECTION AND IDENTIFICATION

Conclusion

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 373-6972 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

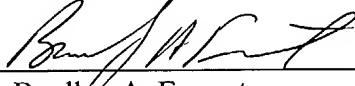
Respectfully submitted,

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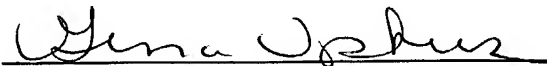
Date 4-5-2004

By 
Bradley A. Forrest
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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 5 day of April, 2004.

Gina M. Uphus

Name



Signature